

## **REMARKS**

The Office Action dated May 2, 2006, has been received and carefully noted. The above following remarks are being submitted as a full and complete response thereto. The Applicants respectfully request reconsideration of this application in view of the following.

By this response, no claims have been amended. Accordingly, Claims 1-2 are currently pending in the application and subject to examination.

### **Rejection Under 35 U.S.C. § 103(a)**

Claims 1 and 2 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ogihara (U.S. Patent Application Publication No. 20002/0075780) in view of Ogawa (U.S. Patent Application Publication No. 2002/0105864). The Applicants respectfully traverse the rejection.

Claim 1 recites a disk kind identifying method that identifies a DVD-RW or a DVD+RW, comprising the steps of detecting a wobble signal recorded on a recording surface of a disk, determining whether a cycle of the detected wobble signal is 186 times or 32 times as long as a data cycle, and identifying, when the cycle of the wobble signal is 186 times, a kind of said disk as the DVD-RW, and when the cycle of the wobble signal is 32 times, the kind of said disk as the DVD+RW.

The Applicants submit that the applied prior art fails to teach or suggest all the elements of Claim 1. Specifically, the applied prior art fails to teach or suggest at least the combination of determining whether a cycle of the detected wobble signal is 186 times or 32 times as long as a data cycle and identifying, when the cycle of the wobble

signal is 186 times, a kind of said disk as the DVD-RW and when the cycle of the wobble signal is 32 times, the kind of said disk as the DVD+RW.

The Office Action cites Ogihara, paragraphs [0027], [0028], and [0040] as allegedly teaching these elements. However, Ogihara merely discloses that the controller 105 identifies the mounted optical disk 101 based on the detection levels LV1, LV2 (see Ogihara, paragraph [0040]). This process is described in more detail in paragraph [0036], which teaches that, when the relationship of  $LV1 > LV2$  is established and the LV1 is at a predetermined level or higher, the mounted optical disk 101 is identified as a DVD-RW disk. In the case where the relationship of  $LV1 > LV2$  is established and the LV2 is at a predetermined level or higher, the mounted optical disk 101 is identified is a DVD+RW disk (see Ogihara, paragraph [0036]). Accordingly, Ogihara uses threshold values LV1 and LV2 to determine whether a disk is a DVD-RW disk or a DVD+RW disk.

Further, in Ogihara, as described in paragraph [0040], the wobble detector 118 extracts the wobble frequency components for the DVD-RW and +RW respectively from the push-pull signal using the band-pass filters 121 and 122. Therefore, it is necessary in Ogihara to reproduce the signal corresponding to the groove wobble from the predetermined position in the radius direction of the optical disk in a state that the optical disk is rotated with the predetermined rotation speed (see Ogihara, paragraphs [0027], [0028]).

For example, in an embodiment of the present invention, when the wobble cycle is 186 times, or has a period of  $186T$ , for the DVD-RW, or the wobble cycle is 32 times, a

period of 32T, for the DVD+RW, these are detected using the criterion of T. These wobble periods do not rely on the rotation number of the optical disk and its radius-direction position. Accordingly, in the present invention, it is possible to detect the wobble period and thus identify the kind of disk, without depending on the rotation number and the radius-direction position of the optical disk.

Ogawa is cited as allegedly teaching the standard clock frequency of 26.16 MHz, and the standard groove wobble frequency of a DVD+RW disk as 818KHz. However, Ogawa fails to cure the deficiencies outlined above with respect to Ogihara, specifically failing to teach or suggest at least the combination of determining whether a cycle of the detected wobble signal is 186 times or 32 times as long as a data cycle and identifying, when the cycle of the wobble signal is 186 times, a kind of said disk as the DVD-RW and when the cycle of the wobble signal is 32 times, the kind of said disk as the DVD+RW.

Accordingly, Ogihara and Ogawa, alone or in any combination thereof, fail to teach or suggest the combination of determining whether a cycle of the detected wobble signal is 186 times or 32 times as long as a data cycle and identifying, when the cycle of the wobble signal is 186 times, a kind of said disk as the DVD-RW and when the cycle of the wobble signal is 32 times, the kind of said disk as the DVD+RW, as recited in Claim 1.

Claim 2 recites a disk apparatus which identifies a DVD-RW or a DVD+RW and executes recording and reproducing depending upon a kind of an identified disk, comprising a detector for detecting a wobble signal recorded on a recording surface of said disk, a determiner for determining whether a cycle of the wobble signal detected by said detector is 186 times or 32 times as long as a data cycle, and an identifier for

identifying, when the cycle of the wobble signal is 186 times, the kind of said disk as the DVD-RW, and when the cycle of the wobble signal is 32 times, the kind of said disk as the DVD+RW.

The Applicants submit that the applied prior art fails to teach or suggest all the elements of Claim 2. Specifically, the applied prior art fails to teach or suggest at least a determiner for determining whether a cycle of the wobble signal detected by said detector is 186 times or 32 times as long as a data cycle, and an identifier for identifying, when the cycle of the wobble signal is 186 times, the kind of said disk as the DVD-RW, and, when the cycle of the wobble signal is 32 times, the kind of said disk as the DVD+RW.

The Office Action again cites paragraphs [0027] and [0028] of Ogihara as allegedly teaching these elements of Claim 2. However, as discussed above with respect to Claim 1, Ogihara merely uses threshold values LV1 and LV2 to determine whether a disk is a DVD-RW disk or a DVD+RW disk. Ogihara fails to teach identifying a disk as a DVD-RW when the cycle of the wobble signal is 186 times and identifying a disk as a DVD + RW when the cycle of the wobble signal is 32 times. Also as mentioned above with respect to Claim 1, Ogawa fails to cure at least these deficiencies.

Accordingly, Ogihara and Ogawa, alone or in any combination thereof, fail to teach or suggest all the elements of Claim 2.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. M.P.E.P. § 2143.03. For at least

the reasons provided above, the Applicants submit that Ogihara in view of Ogawa, either alone or in combination, do not teach or suggest all the elements of Claims 1 and 2.

Further, it is a well known that in order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success **must** both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See M.P.E.P. §2143.

Moreover, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention ***where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.*** "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (emphasis added). See M.P.E.P. §2143.01.

Here, Ogawa teaches a method and a system for compensating the track offset in optical disk drives. In Ogawa, wobbled grooves are formed on the disk in such a way

that a wobbling signal of 818kHz is generated if the disk is rotated at a tangential velocity of 3.49 m/s, the same as that of the DVD+RW standard. However, nothing in Ogawa teaches or suggests modifying or combining Ogawa to cure the deficiencies of Ogihara. Neither Ogawa nor Ogihara mentions DVD-RW standards, nor does Ogawa mention any way of identifying the type of disk based on the cycle of the wobble signal. Accordingly, the Office Action fails to set forth a sufficient showing of motivation to combine the references.

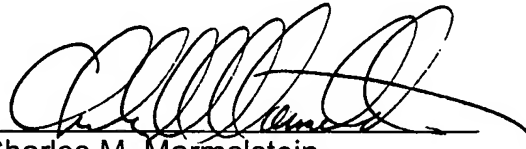
Accordingly, the Applicants submit that the Examiner has failed to establish a prima facie case of obviousness.

### **Conclusion**

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

In the event that this paper is not being timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account Number 01-2300, referencing Docket Number 100341-00046.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'CMM', written over a horizontal line.

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